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Press Release

BSES & Ola Electric partner to set-up EV Battery Swapping Stations

- **Battery swapping stations to be set-up at mutually identified locations**
- **Will cater to EVs (2/ 3 wheelers and E Rickshaws)**
- **Will offer several benefit to consumers and the discom:**
    - **Mimic the experience of a fuel-station**
    - **Eliminate wait-time: Battery swapping will take < 3 minutes**
    - **Reduce power-theft**
    - **Help manage peak power load**
    - **Facilitate energy-storage for solar power**

New Delhi: BSES Discoms and Ola Electric, a prominent name in the electric vehicle value chain, have signed MoUs for setting-up Battery Swapping and Charging Stations. While BSES Rajdhani Power Limited (BRPL) will set-up the station in South and West Delhi, BSES Yamuna Power Limited (BYPL) will do so in East and Central Delhi.

The agreement, valid for a period of three years, is a first of its kind agreements in Delhi and is likely to hasten the adoption of EVs in the city. These EV Battery Swapping Stations will be set-up at mutually identified locations. Electric vehicles (two & three wheelers and E Rickshaws) will be able to avail the services at these stations. Looking at the response, their number will be increased. Some of these stations will also have a provision for charging electric cars.

As part of the agreement, Ola Electric will manage and operate these stations through a cloud based software system. On its part, BSES will facilitate in identification of strategic locations for battery swapping (and charging) stations, depending on the optimum usage and potential of electric vehicles in the area.

Commenting on the BYPL-Ola Electric partnership, Mr P R Kumar, BYPL CEO said, "BSES is gearing-up to play a major role in the promotion of the EV sector in the national capital. This partnership with Ola Electric is in continuance of these efforts. Setting-up of battery swapping stations will virtually eliminate the wait-time for charging, thus removing a major impediment preventing the adoption of EVs. I am confident, such measures will provide the much needed trigger to increase the penetration of EVs in Delhi and go a long-way in reducing pollution"

Commenting on the collaboration, Mr Amal Sinha, BRPL CEO said, "BSES is committed towards green and sustainable initiatives. Promoting E-Mobility and renewables, a key to attain climate action goals, are the two main drivers of this endeavour. As part of this, we are actively engaging with key stakeholder to create an ecosystem, including allocation of land for setting-up such stations, for the promotion of E-mobility. Setting-up of battery swapping stations will not boost the adoption of EVs, but also help in reducing power-theft by E Rickshaws."

Speaking about this collaboration, Mr Ankit Jain, Co-Founder, Ola Electric, said, "Ola Electric has been working closely with ecosystem partners across the country to facilitate mass adoption of EVs and create solutions to operate with minimal restrictions. This program further augments our efforts to lay a strong foundation to enable the smooth functioning of EVs across the country by creating a widespread network of charging solutions that vehicle owners and operators can rely on."

Benefits (Consumers)

A critical impending growth of EVs is the lack of charging infrastructure. Battery swapping has significant potential as a mode for charging small vehicles, creating favorable economics for consumers, discoms and also for the power sector per se.

Some of the benefits include:

- **Mimics the experience of existing fuel pumps:** Battery swapping is swift and convenient. It can take the same amount or less time as existing fuel pumps.
- **Eliminates wait time for charging:** Battery swapping drastically reduces wait time through its under-3 minute interchange of batteries vs. 1.5-2 hrs minimum for charging solution.
- **Increases run-time and improves earnings of commercial EV drivers:** Battery swapping can boost driver earnings. Vehicles using advanced batteries through swapping have been shown to run 25% longer compared to those conventional charging and 50% more compared to Lead-Acid battery-based vehicles.
- **Reduces the upfront cost of EVs and improves demand**
- **Improves battery life and performance**
- **Lowers charging/swapping fee on account of increased productivity of land:** Park-and-charge solutions demand land usage. This results in higher fees for the end user. Swapping requires a fraction of the real estate to serve the same number of vehicles, and may also optimize other resources such as manpower.
- **Allows for innovation, and helps create superior, durable, and long-lasting vehicles and batteries:** The incentive to manufacture low-cost EVs for a price-sensitive market has resulted in the flooding of the markets by low-performance integrated battery-operated vehicles (EVs fitted with batteries). This compromises the quality of batteries and drive trains, promoting short-life and substandard technologies. Separating the battery, which constitutes 30-50% of the total cost of EVs, from the vehicle, thus enabled by swapping, allows OEMs relieve customer price pressure and improve the quality of both vehicles and batteries.

Benefits (Discoms and Power Sector)

Apart from the consumers, battery swapping stations have benefits for the discoms and the power sector as a whole. Some of them include: (i) Increased electricity consumption increases revenue for the discom, (ii) Reduction in power-theft, (iv) Load balancing and shaving the peak power demand by being charging batteries during non-peak hours, (v) Integration of solar of renewable energy in the grid by facilitating energy-storage for solar power and (vi) Offers a second lease of life to batteries and optimizes the utilization of assets.

Moreover, by optimally utilizing the land space available in urban agglomerations, battery swapping provides an opportunity to improve the viability of charging business given the low utilisation rates. A swapping establishment requires a fraction of the real estate needed, than required for setting up a dedicated park and charging station. Swapping, therefore, is attractive in urban areas, where land is difficult to obtain. Further, swapping can be established at unused or under-utilized spaces such as the land under a flyover or metro corridor, wasteland, etc.

BRPL & BYPL are premier power distribution companies and Joint Ventures between Reliance Infrastructure Limited and GoNCT.

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